Joint Capability Technology Demonstrations (JCTDs)

FY08 Process

U.S. Strategic Command

ACTD/JCTD Conference

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Office

of the

Deputy Under Secretary of Defense

(Advanced Systems & Concepts)

John Wilcox

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Joint Capability Technology Demonstrations (JCTDs)

- **A coherent approach that provides a means for demonstrated new joint and coalition capabilities to transition without traditional barriers (a “cradle to grave” model).**

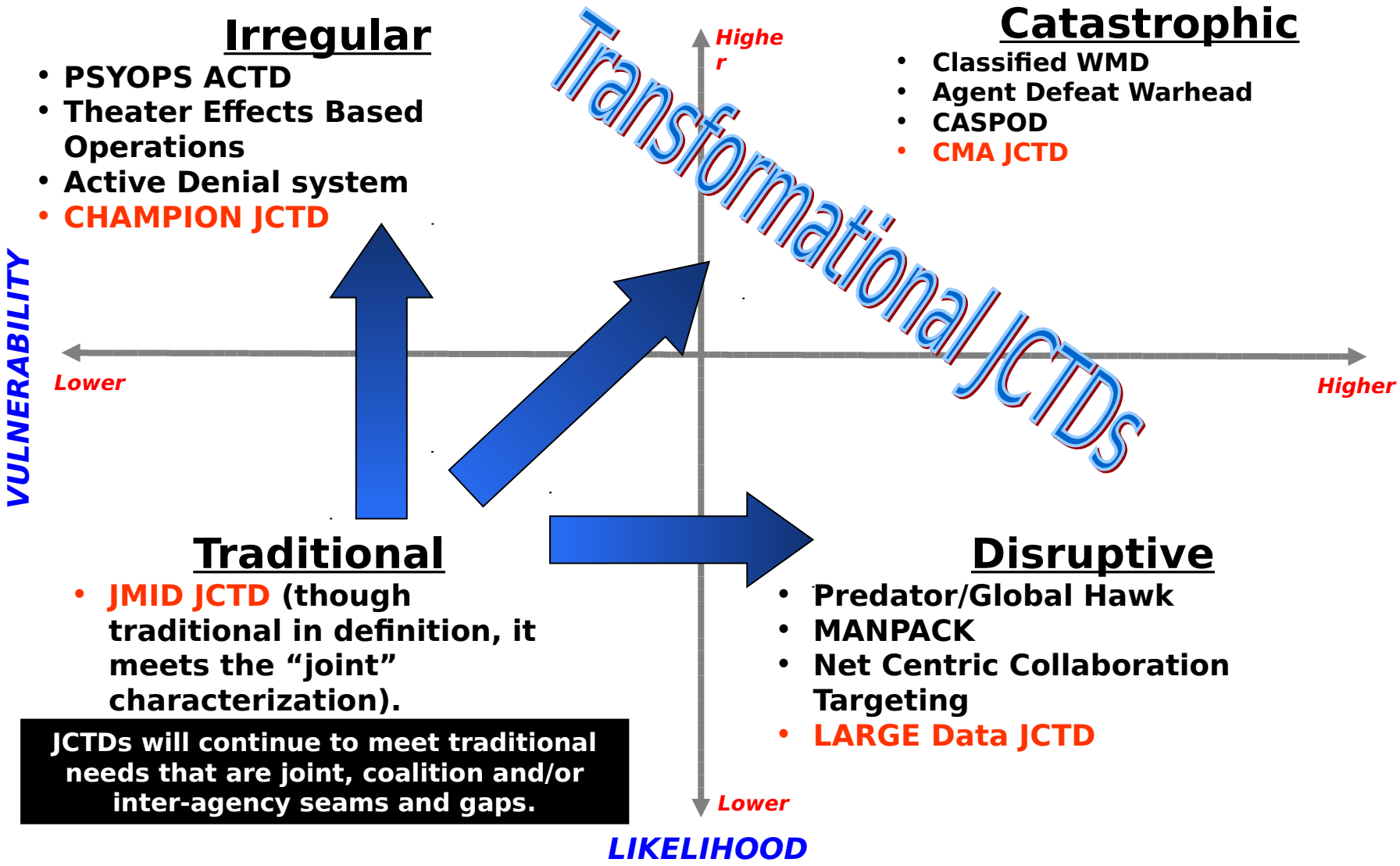
- **Developed to address concerns of CoCom customers, USD (AT&L) and Comptroller, GAO, DSB, & Congressional Staff.**

- **Introduce a new generation of demonstration processes: faster start, reduced risk, enabling Service partnerships and assured transition.**

What are JCTDs?

- ***Joint, Coalition & Interagency***
- **Demand Driven (~ 80%)**
  - **Capability Needs**
  - **CoCom Specific / CoCom Common**
- ***Transformational* (~ 20%)**
  - **Disruptive Innovation**
  - **Tech Push**

Areas of US / Coalition Risk



What Does JCTD Success Look Like?

- COCOM Demand Driven
- Quicker Starts and Finishes
- Increased Transition
  - Transition new capability to a Program of Record
  - Start a new Program of Record
  - Risk reduction or cost reduction to a Program of Record
- “Game Changers” (e.g., Change of doctrine)
- “Big Bets” -- transformational, new capability

ACTD-JCTD Wing Walk: Enhancing Business Model for Joint Customer

Combatant Commander remains the Primary Customer	
Advance Concept Technology Demonstration (ACTD)	**Joint Capability Technology Demonstration (JCTD)**
o **Final Demonstration: 3-4 years**	• **Final Demonstration: 2 – 3 years with spiraled-out capabilities.** **Impact: Mature capabilities demonstrated to the joint warfighter faster.**
o **Challenging ACTD selection process: CoCom near-term versus rigid PPBE 2 year resource process.**	• **Greater CoCom Focus through JCTD Selection Process:** Stakeholders have decision in resource allocation for funds already set-aside. **Impact: JCTDs maintain relevancy/purposely resourced for success.**
o **OSD provides limited funds: Services required to "break" programs to fund new capabilities.**	• **JCTD Resources (Quick Start):** OSD provides majority Service funding for the first two years of the JCTD. **Impact: Accelerate JCTD initiation and increase funding stability.**
o **Difficult to track ACTD funding in Service lines (multiple Program Elements).**	• **JCTD-specific Program Elements Created**. **Impact: Increase funding accountability and tracking. Provides time for Services to POM for selected JCTDs.**
o **ACTDs face difficult Transition challenges, creating "joint & coalition orphans."**	• **JCTD Transition stability: Funding across the Acquisition process. DAE pilot program** **Impact: Prevents delays and provides a strong advocate for "joint orphaned" capabilities.**

Performance Metric Comparison
ACTD - JCTD

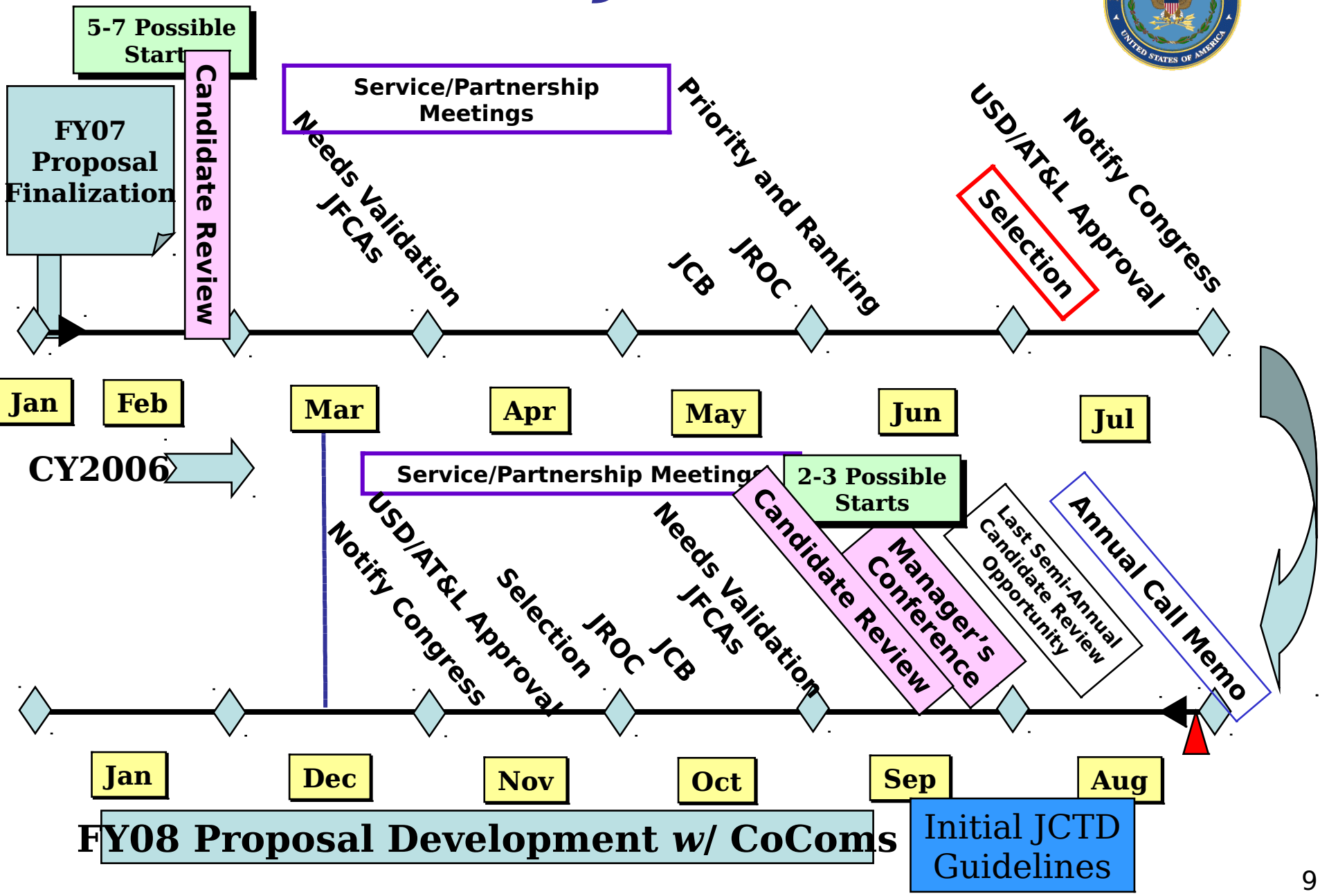
Performance Metric	ACTD	JCTD
Project Selection Focus	Threat Based: Shared Military Service and CoCom influence	Capability Based: Greater CoCom influence looking at nearer term **joint/coalition** needs..
Spiral Technologies	No Metric currently established	Spiral Technology available within **one year** of JCTD initiation.
Final Demonstration Completed (Starting Point: Approved ID)	3 to 4 years after initiation (Implementation Directive (ID) Signed)	50% completed by the end of the 2nd year. All JCTDs completed by the end of the 3rd year.
Shared Funding and Visibility of resources	OSD provides no more than 30% of the budgeted resources. Funding provided from many different program elements.	OSD provide significantly more funding (more than 50% depending on cost of the JCTD), especially in the first two years.
Military Utility Assessment (MUA) conducted by an independent activity	MUA traditionally tied to a specific planned exercise for evaluation	JCTDs not necessarily tied to an exercise. Greater flexibility to establish military utility via operational "real-world" demonstration or specifically designed test / venue
Transition of technology	70% of ACTDs transition at least one product to sustainment	80% of JCTDs transition at least 50% of their products to sustainment

Source: FY 2006 President's Budget

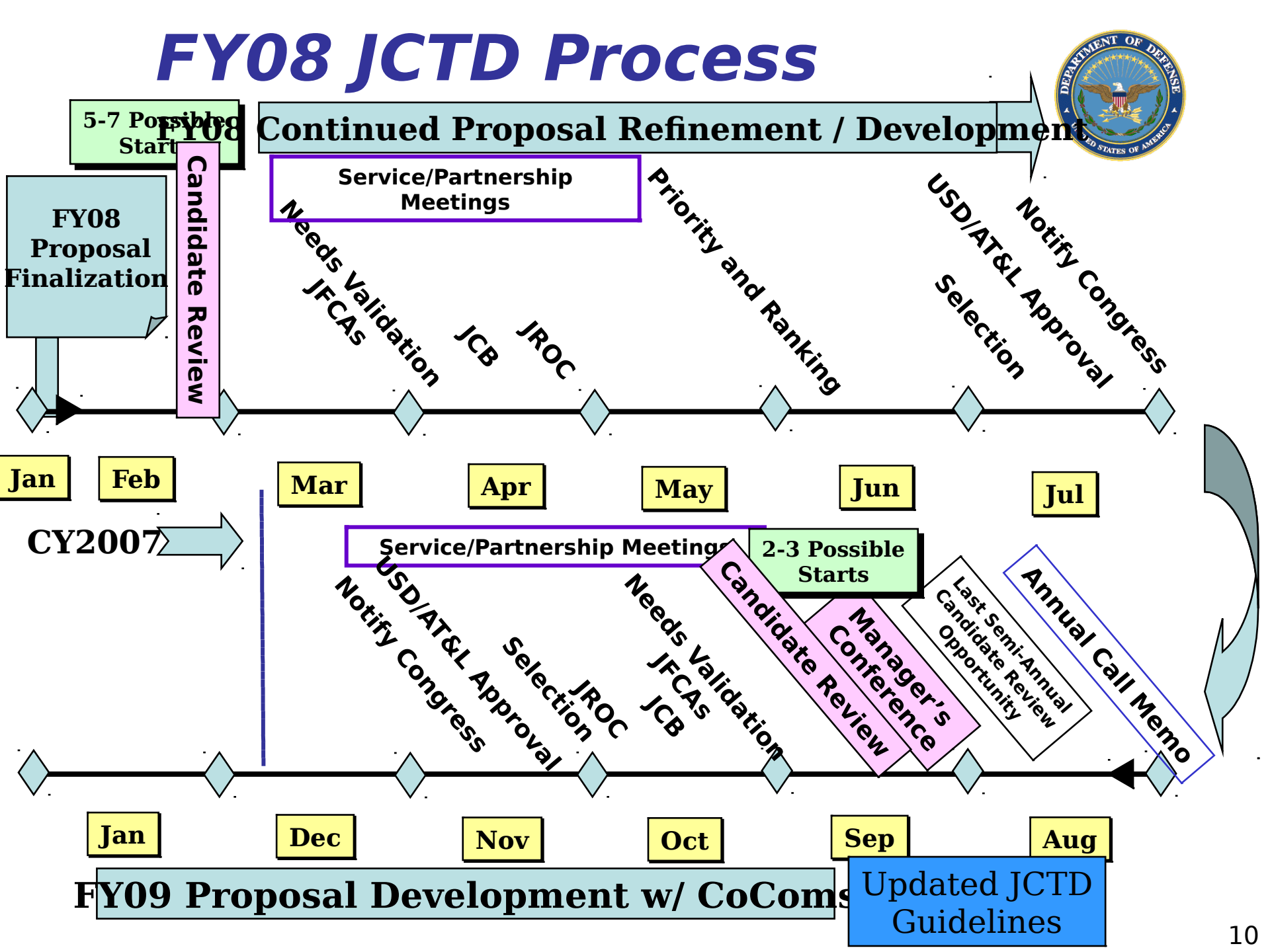
AS&C JCTD Current Efforts

- ***Transition*** 'fully' to ***JCTDs***
- Develop ***JCTD Operating Guidelines***
  - Retain Flexibility & Respond Rapidly
- Improve / Integrate ***CoCom Lead with JFCA Lead Processes*** to serve effectively!
- ***Institute KIMS*** to streamline JCTD Process
  - Promote efficiencies between CoComs/Services/OSD/Agencies, …Industry/Coalition
- Revamp ***Military Utility Assessments*** Process to better serve CoComs and Transition

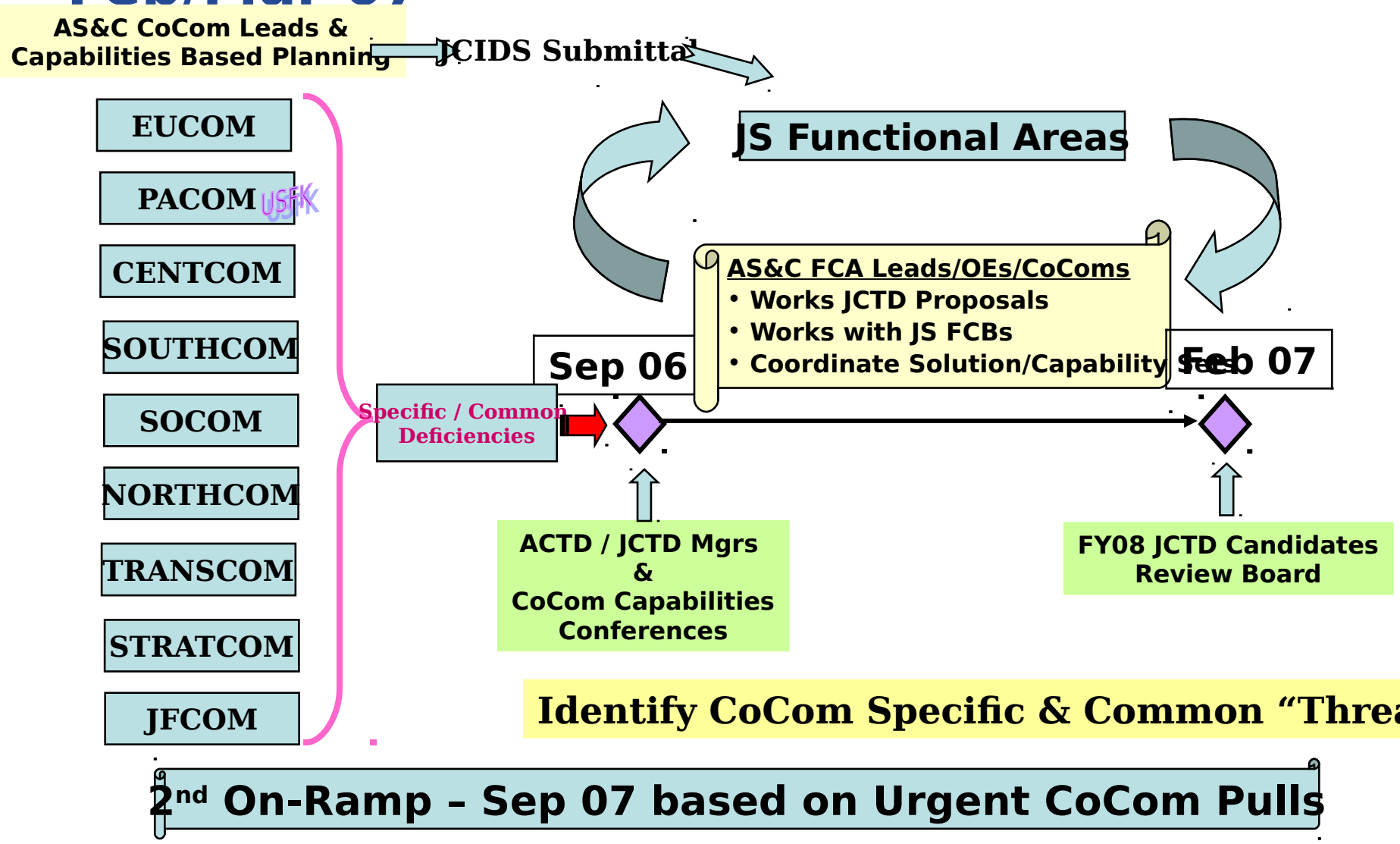
FY07 ACTD/JCTD Process



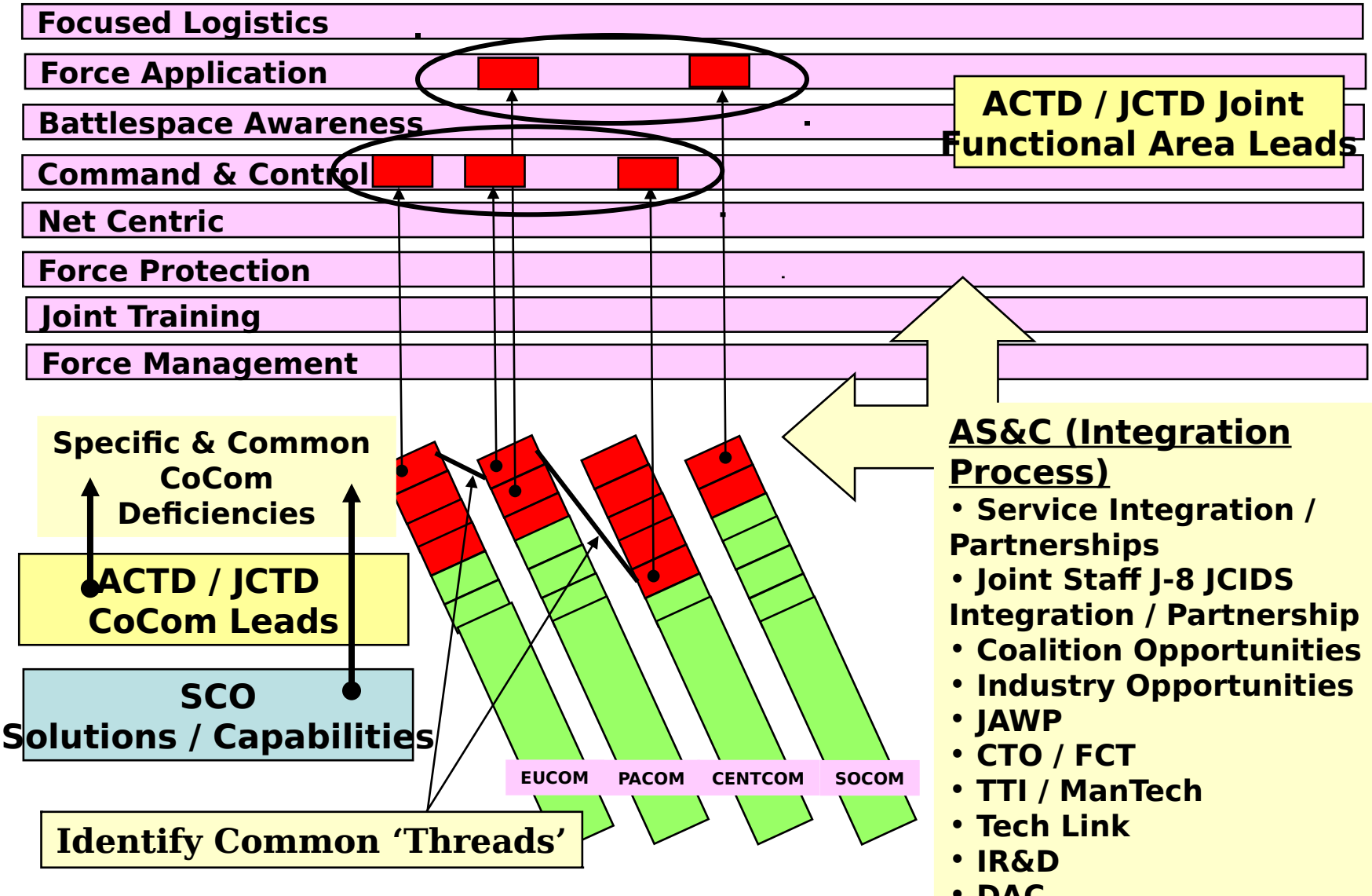
FY08 JCTD Process



Capabilities-Based JCTD Selection Process – "First On-Ramp – Feb/Mar 07"



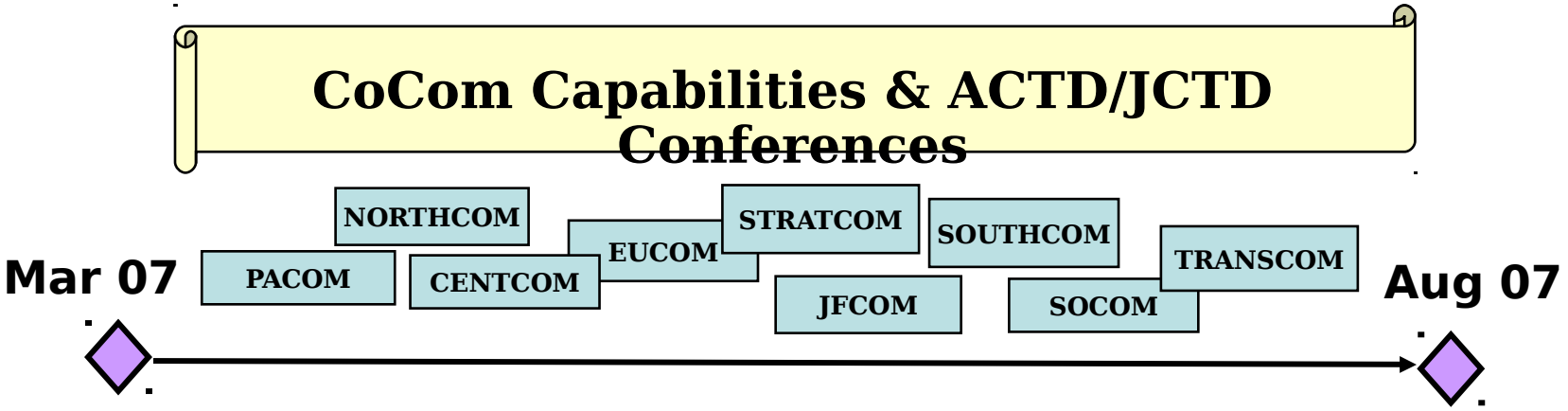
Capabilities-Based JCTD Formulation Process (Sep – Jan)



Beginning of FY08 Process

- Annual Call Memo
  - "2 On Ramps" for JCTD Proposals
    - Was "Breakfast Club"…
      now JCTD Executive Candidate Review Board
    - Feb 07 – 5-7 Proposals (Ranked & Prioritized)
    - Sep 07 – 2-3 Proposals max! ('Urgent' Pull)
- Manager's Conference
  - Monday is CoComs/Services Forum
  - Services can present 'White Paper' Proposals
- Sep 06 – Jan 07 "FY08 Candidate Development"
  - CoCom "Gatekeeper" for Candidate Review Board
- Proposals can be submitted Year Round
  - Must wait for "On Ramp" – either Feb or Sep

FY08 Annual Conferences – Combatant Commander



- **Provides a Forum to conduct ACTD/JCTD Annual Oversight Groups – "Rudder Check"**
- **Expands Understanding of the Specific CoCom Challenges & Gaps…Identify common shortfalls/gaps**
- **Opportunity for Needs/Capability Workshops**
- **Opportunity to collaborate with Coalition &**

JCTD Proposal Development

- Proposals accepted Year Round
  - Sent to CoComs (via KIMS) for further development and adoption
  - 80% of JCTD Proposals – CoCom is primary Gatekeeper - ~20% Transformational Input
- Coordinate with FCBs – JCTD JFCA Leads & CoCom Leads
  - Needs Validation
  - Joint Staff criteria – emphasis area
- Selection and Execution via every 6 months 'On Ramps' – "when they are ready… JCTD CRB
- Operating Guidelines being developed
  - Proposal Workshop template, etc.

Transition

- Transition Planning Upfront & in Imp Dir
- ‘Transition Phase’ after Demo – updated yearly – Interim Capability for Warfighter
- Semi-Annual Transition Review Process
  - CoCom / Service / OSD / JS Interaction
  - DDR&E Support for POM efforts
- Business Case Analysis (OE/OM/TM/XM)
- Terry Mitchell – Process Lead

Mgrs Conference – Sept 06

- *Monday* – CoComs / Services Day
  - Needs / Capabilities Discussion – CoComs
  - Potential Solutions Discussion – Services
  - Various Solution Sources – OSD
- *Tues* – JCTD Managers Tutorial
- *Wed / Thurs* – Main Conference
- *Fri* – JCTD Candidate Review Board
  - PV, Re-Attacks, etc.

FY08 JCTD Process - Summary

- Guidelines with Flexibility – May not ALWAYS follow process but 70% solution
- Proposal Development as soon as possible with CoComs
  - Path to JCTD Candidate Review Board (aka Breakfast Club) is with CoCom Sponsorship
  - Transformational JCTD Proposals may go without CoCom
  - Fewer proposals but 'more developed'/'socialized' through KIMS functionality
- Transition up-front planning a must…continuous process!
- On-Ramps provided Semi-Annually – 'Flexibility'
  - Feb still main 'on Ramp' with larger number of different type proposals… transformational / joint / coalition / inter-agency
  - Sep is CoCom specific/common needs pull only (2-3 max)
- Solicit Ideas and Better Ways – Continuously Improve!

Bottom Line

Rapidly transition new and/or enhanced capabilities to the warfighter so that they can:

Questions?

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Joint Capabilities Technology Demonstrations (JCTDs)

9-11 was a turning point

Historical Vs Now

Military distinct from civilians

- Uniformed military
- Distinct military equipment
- Distinct Military Frequencies
- From Service and agency intelligence
- Exposed forces forward
- From vertical structures and processes (stovepipes)
- Department of Defense solutions
- Nation States change action measured in Years

Need to distinguish from Civilians

- Civilian dress
- Civilian equipment
- Civilian Frequencies
- Truly Joint Information Operations Centers
- Reach back to CONUS to support expeditionary forces
- More transparent, horizontal integration (matrix)
- Interagency approaches
- Shaping the Choices of Countries @ Strategic Cross roads
- Terrorist TTP's and change action measured in months

What has not changed is our need to adapt to this new environme

Joint Capability Technology Demonstrations (JCTDs)

From AS&C's PB06 R-2…..

Beginning in FY 2006, a new ACTD business process will be initiated which will take the successful ACTD program and update it to meet the Department's transformational goal of becoming capability vice threat based in its focus. The program will be referred to as the Joint Capability Technology Demonstration (JCTD) program. The JCTD program will include many of the positive aspects of the ACTD program, but will be revamped to meet the defense challenges of the 21st century. The new process will integrate the ACTD program with the new Joint Integration and Development System (JCIDS) developed by the Joint Chiefs of Staff (JCS). Beginning in FY 2006, the Department estimates a three to five year transition period from the current ACTD process to the improved JCTD program. Eventually, JCTDs will replace ACTDs, providing an even faster process that focuses on joint and transformational technologies that are initiated in Science and Technology (S&T) and carried through the difficult transition stage, sometimes referred to as the "S&T valley of death." The new JCTD business model includes a Defense Acquisition Executive (DAE) pilot program which will take a limited number of "joint peculiar" JCTDs past milestone B, through engineering and manufacturing, and into procurement, followed by initial sustainment---a "cradle to grave" approach. The piloted program envisions using joint acquisition activities like the Joint Precision Strike Demonstration (JPSD) program office, or even U.S. Special Operations Command (USSOCOM), to provide the necessary acquisition compliant and program management functions. The DAE pilot program will give overall programmed oversight of JCTDs that are deemed uniquely joint/combined (i.e., capability directly supports more than one Military Service) and/or transformational. The new JCTD demonstration model will specifically address congressional concerns and recommendations made by the General Accountability Office (GAO) regarding the ACTD program.

Initiated in FY06, JCTDs will be phased replacement for ACTDs over 3-5 years

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What are Joint Capabilities?
AS&C Program Perspective

Multi-Service Core Capabilities

Common denominator Military forces provided worldwide as self-integrated, self-sustaining echelons by the Services.

(GPS, Movement Tracking System)

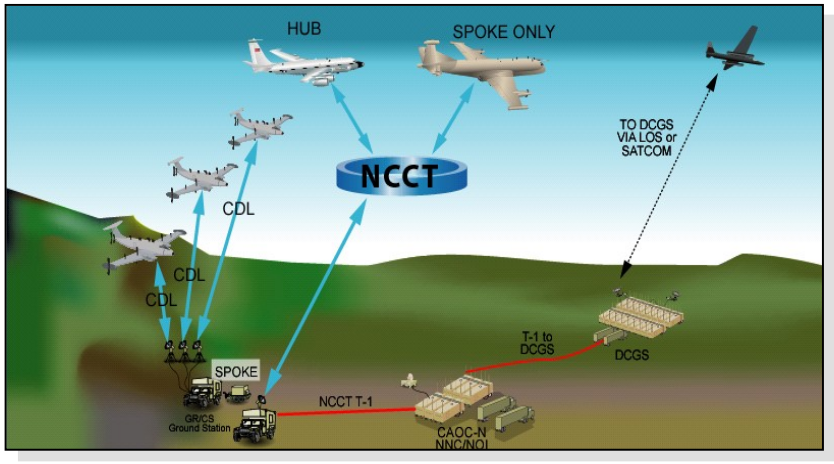
Joint / Coalition Enabling Capabilities

Additional capabilities required by warfighters to exercise joint / coalition Command & execution, and to enable core military elements to function effectively as a coherent joint / coalition force.

(Network Centric Operations, Common Op Picture)

Joint is an inter-Service reliance acting together as one - not a patchwork of deconflicted Service operations.

(General Tommy Franks, excerpts from *American Soldier)*

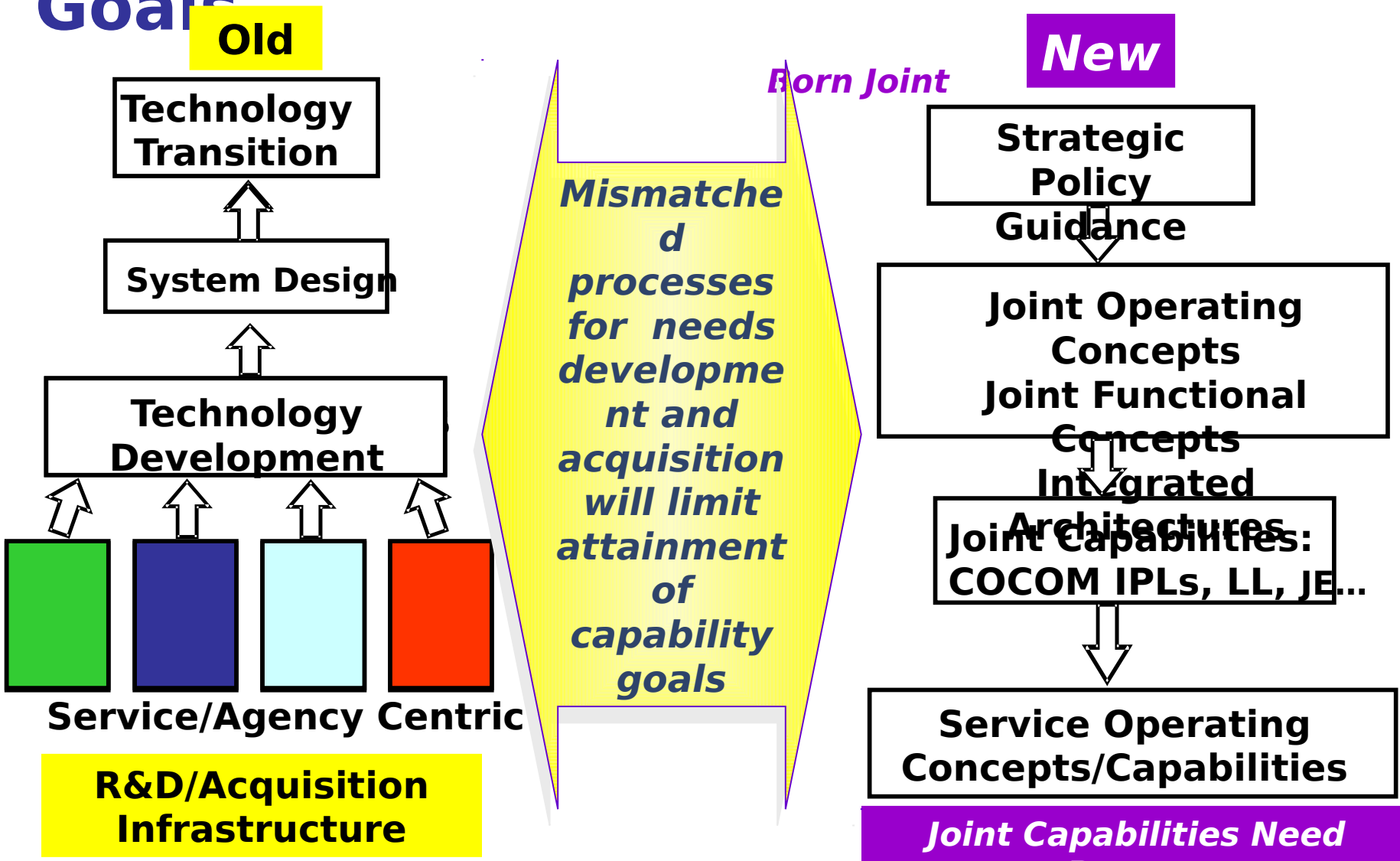


Unique Regional/Specified Mission Requirements

Capabilities beyond common core military capabilities required by warfighters to effectively function in operational environments associated with assigned regional or specified missions.

(Foliage Penetrating Radar, Language Translators)

The Challenge: Meeting Joint Capability Goals



How JCTDs Fill the Gap